

# OFFICIAL PUBLICATIONS OF CORNELL UNIVERSITY

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VOLUME II

NUMBER B

## ANNOUNCEMENT OF THE WINTER COURSE IN DAIRY INDUSTRY 1911-12

OCTOBER 15, 1911  
PUBLISHED BY CORNELL UNIVERSITY  
ITHACA, NEW YORK



# WINTER COURSE IN DAIRY INDUSTRY

## 1911-12

This course is intended especially for persons who make a business of manufacturing butter or cheese or handling milk for the market. Anyone who wishes instruction in farm dairying should consult the description of a course in that subject in the complete Announcement of the Winter Courses.

The Winter Course in Dairy Industry will begin on Tuesday, November 28, 1911, and will close on the afternoon of Friday, February 23, 1912. Instruction will begin at 8 a. m., Wednesday, November 29.

### **The New Dairy Building**

The Department of Dairy Industry occupies the large building east of the Main Agricultural Building, with which it is connected by a covered passageway. The Dairy Building is in the form of the letter L. One part, two stories high, with attic and basement, contains a large lecture room, a small class room, a milk-testing laboratory equipped with different styles of Babcock and other testing apparatus, dairy bacteriology laboratories, a museum, a reading room, offices, two rooms for instruction in dairy mechanics, locker and toilet rooms, and a laundry room. The other part of the building is devoted to the handling of milk and the manufacture of milk products. It is one story high, with attic, and with basement under some of the rooms. Its construction represents the latest ideas in the erection of sanitary dairy buildings. It includes three rooms about 25 x 30 feet each, which are used respectively for separating milk, for churning, and for making cheddar cheese. There are also numerous smaller rooms for instruction in farm-dairy work, the preparation of starters, market milk, fancy cheese, and dried casein. There are also a milk-receiving room, a boiler room, curing rooms, and refrigerator and store rooms. The equipment includes various kinds of apparatus found in commercial dairy plants. The leading makes of separators, churns, and other dairy apparatus are used by the students. In the winter, milk and cream equivalent to about ten thousand pounds of milk are handled daily, and in the summer the milk received daily at the Dairy Building and the cream received

from four subsidiary skimming stations, represent about twenty-five thousand pounds of milk.

### Admission

The Winter Courses are business and occupational courses, not academic; hence, there are no examinations for admission. However, in order that the student may be able to make the best use of the instruction, it is necessary that he should have a good common-school education. Winter Course students are sometimes seriously handicapped in their work by being deficient in arithmetic and in English. Those who are planning to take a Winter Course are advised to review these subjects before coming to Ithaca. Anyone who has graduated from the common schools of the State, or who has an eighth-grade certificate, should be able to do the Winter Course work satisfactorily. When making application, candidates for admission should give a description of their school training and, if possible, should send a certificate or statement from the teacher of the school last attended.

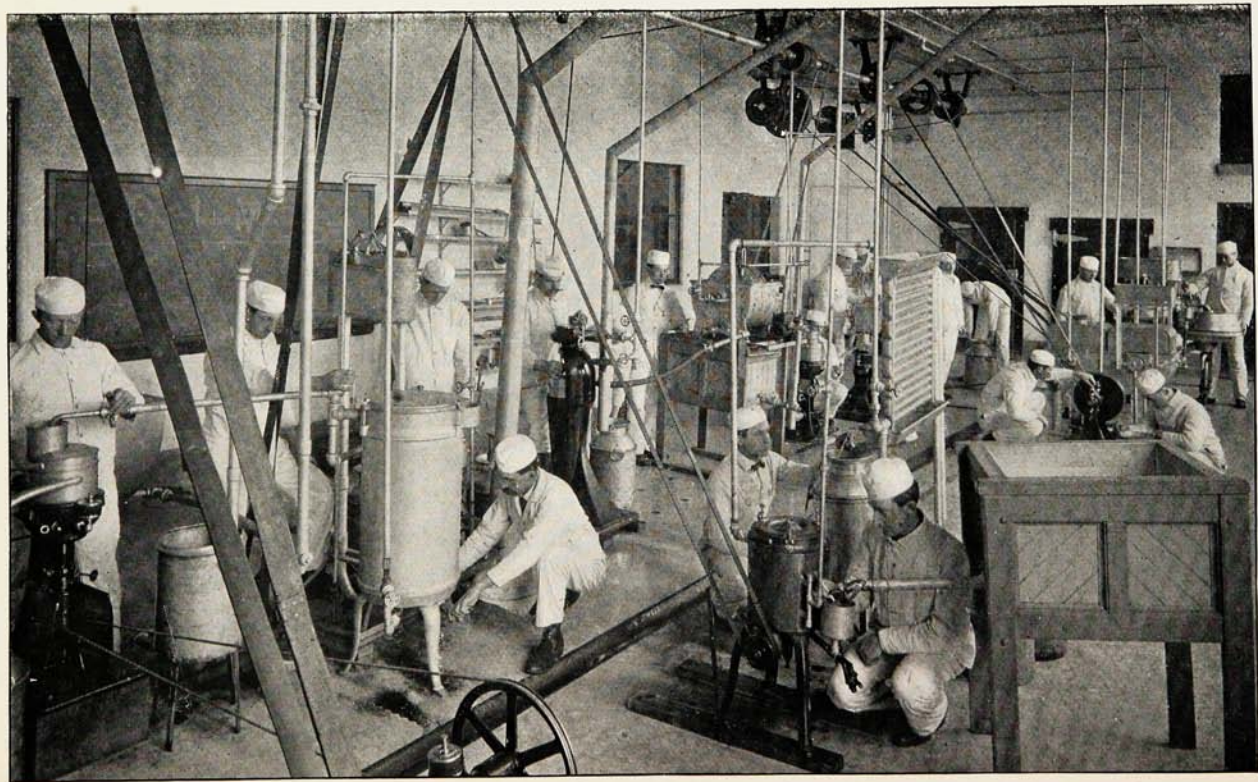
The Course in Dairy Industry is open to both men and women of at least seventeen years of age. Not a few women have taken the work with results satisfactory to themselves and to their instructors. There is no limit to the age above seventeen; some of the best students have been mature men, owners of farms or managers of dairy concerns.

This circular contains an application blank for admission to the Dairy Courses. This should be filled out and forwarded at once by any person that is planning, as yet even indefinitely, to attend the Dairy Course. The filing of an application for admission does not constitute an obligation to attend the course, and applications may be withdrawn at any time.

On account of the limited accommodations in the Dairy Course, candidates for admission must, on the acceptance of their applications, deposit an advance fee of five dollars. This deposit is returnable on request at any time before November 1. In this course, applicants for admission who are residents of New York State are given precedence.

Applicants for admission to the Dairy Course should, by way of preparation, read carefully some of the best books, bulletins, etc., on dairy industry. The Department of Dairy Industry will, on request, suggest appropriate books for this reading.





SEPARATOR ROOM

**Arrival at Ithaca.** Students that desire to secure rooming and boarding places are invited to come directly to the Department of Dairy Industry in the College of Agriculture on their arrival in Ithaca. Instructors will be on duty to assist applicants in finding comfortable accommodations. It is desirable that all such arrangements should be completed before registration day.

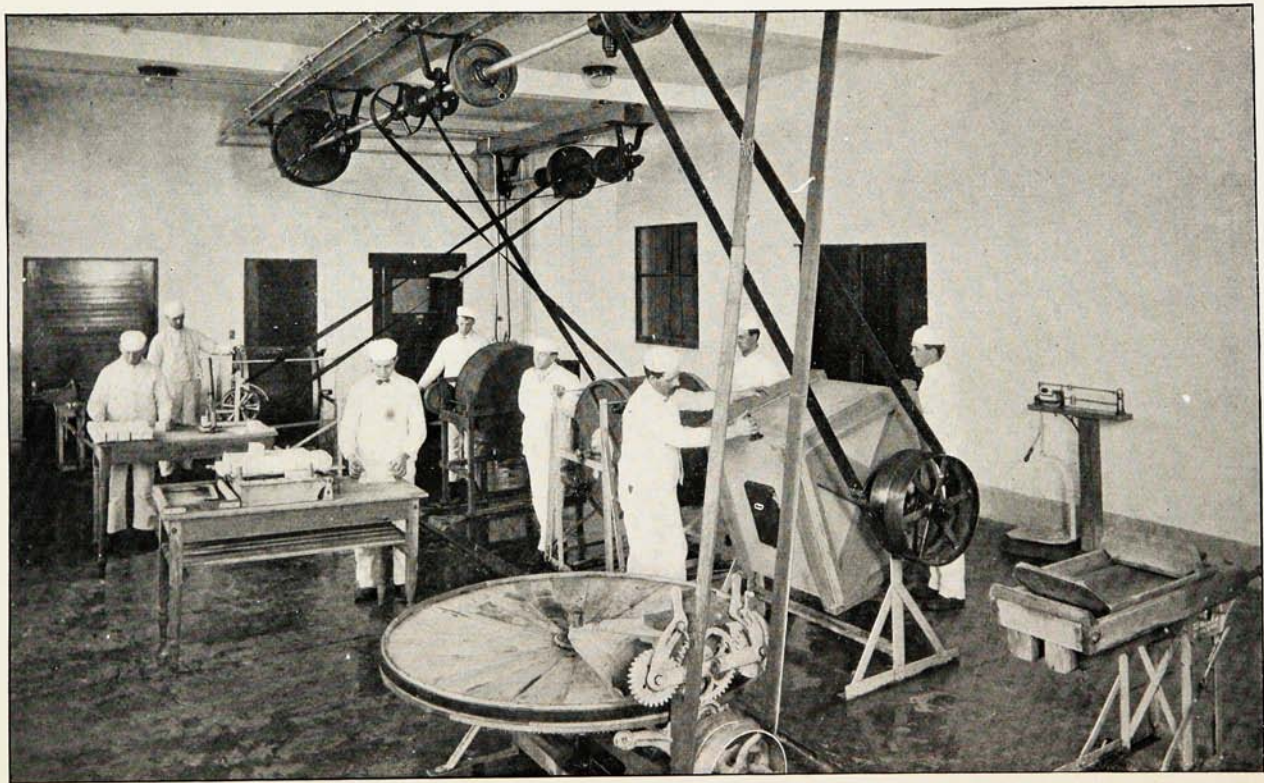
**Registration.** On Tuesday, November 28, beginning at 8 a. m., all students must report for registration at the office of the Secretary of the College of Agriculture, Main Building, Room 122. After registering here and receiving study cards, the students will go at once to the Dairy Building, Room 102 (first floor). Students will be received in this course between 8.30 a. m. and 12 m., or 2 and 5 p. m., Tuesday, November 28. They should report at once after registering with the Secretary. At 5 p. m., there will be a meeting of students and teachers in the lecture room of the Dairy Building.

After the student has filled out and returned his study card showing the subjects for which he wishes to register, he may not change his registration in any respect except on the recommendation of the head of the Dairy Course and with the approval of the Secretary.

### Expenses

Tuition is free to residents of New York State. Non-residents pay a tuition fee of \$25. There are a few small fees and incidental expenses which are detailed under the description of each course, but practically the only expense is the cost of living in Ithaca and the railroad fare to and from Ithaca. Satisfactory table board can be secured in Ithaca, within five to fifteen minutes walk of the campus, for about \$4.00 to \$4.50 a week. Comfortable rooms near the place of boarding may be had at \$1.50 to \$2 a week for each person when two persons occupy the room, and at \$2.50 to \$3.50 when one person occupies the room. The cost of books need not be more than \$5, but it has been the experience of Winter Course students in the past that they wish to purchase a number of books to take home, and it would be well, if possible, to allow at least \$10 for them. The expenses of the students in the Winter Courses of past years, as stated by them, have been from \$85 to \$125, the average now being probably about \$95. By careful management, this may be reduced somewhat, but it is best not to stint too much, as too great economy is likely to lessen the value of the course.





BUTTER-MAKING ROOM

In the past, a few students have been obliged to earn money during the course and have worked at odd jobs about the University or on neighboring farms. This is never advisable unless absolutely necessary. It is much better to borrow the necessary money or to postpone the course of study until another year than thus to be handicapped during the limited time spent at the University. All the energies should be concentrated on the work of the course.

All the fees mentioned under each course must be paid to the Treasurer of the University (Morrill Hall) within five days after registration.

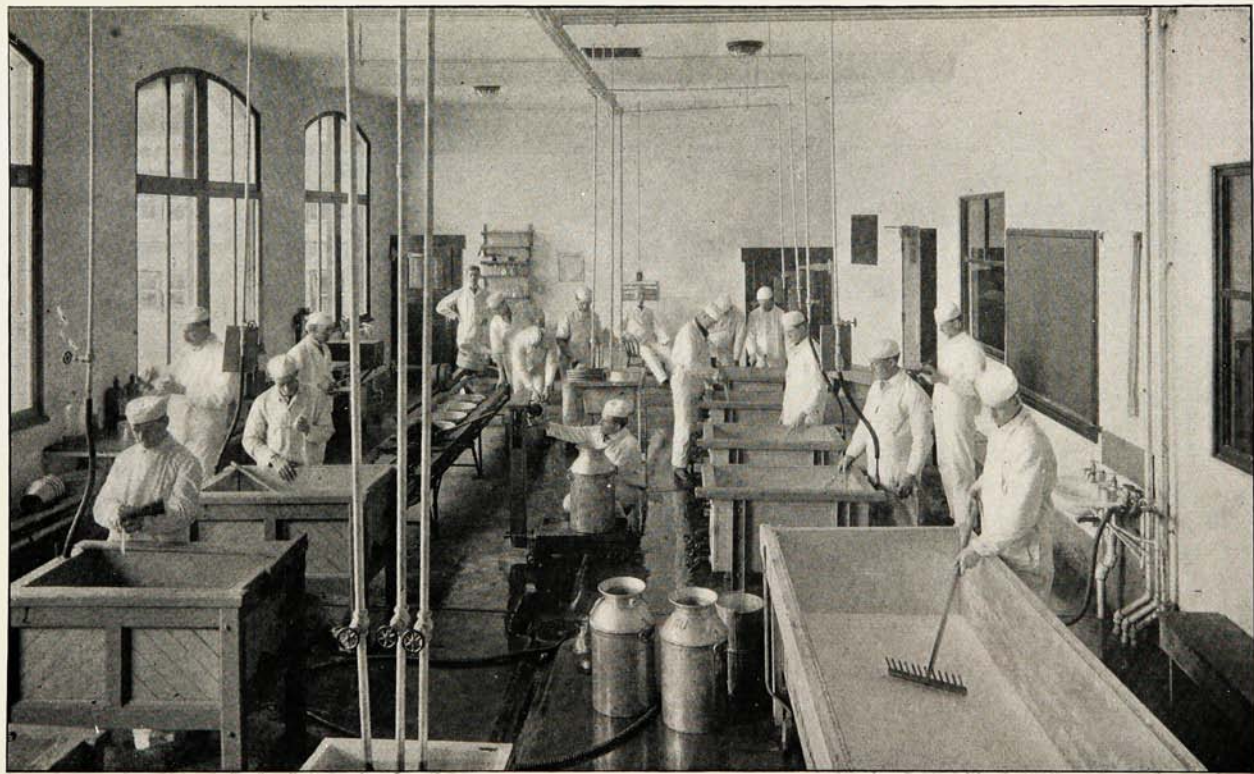
Students are liable for breakage due to carelessness on their part.

**Infirmary Fee.** Every registered student at Ithaca is charged an Infirmary fee, payable at the beginning of each term. For the year 1911-12, this fee will be \$2 a term. Students in the Winter Courses are required to pay the Infirmary fee for one term. In return for the Infirmary fee, any sick student is, on his physician's certificate, admitted to the Infirmary, or in the case of those contagious diseases which under present rules cannot be there cared for, to the Ithaca City Hospital, if receivable under its rules, and is given without further charge a bed in a ward, board, and ordinary nursing for a period not exceeding two weeks in any one academic year. Extra charges are made for private rooms, special foods, and special nurses. If a sick student who has not received two weeks service in the year is refused admittance to either the Infirmary or the City Hospital by reason of lack of accommodation, he is entitled to a refund of the fee.

**Scholarships for Winter Course Students.** At its 31st annual meeting, held at Cortland, February 4, 1904, the New York State Grange resolved to appropriate funds annually, to be given to members of the Order in the form of scholarships in any of the Winter Courses in Agriculture in Cornell University. The scholarships (now twelve in number) are each \$50 in cash, to be awarded to men and women who attain the highest standing on competitive examination. Awards are made each summer. Candidates should apply to the Master of the Pomona Grange in their home counties, or to the Deputy in counties that have no Pomona.

Mr. H. L. Beatty has offered for the year 1911-12, a similar scholarship of a value of \$75, "open to any farmer who resides in Bainbridge, N. Y., or to any boy over sixteen who shall have attended the Bainbridge High School for one full term".





CHEESE ROOM

NEW YORK STATE COLLEGE OF AGRICULTURE AT CORNELL UNIVERSITY  
WINTER COURSE IN DAIRY INDUSTRY

APPLICATION FOR ADMISSION

Name of applicant..... Date of birth.....

P. O..... County..... State.....

Name and address of parent or guardian, or person to be notified in case of serious illness or accident.....

PREVIOUS SCHOOL TRAINING

Name of school last attended..... No. of terms in attendance.....

AMOUNT OF WORK DONE IN THE COMMON BRANCHES

Give experience, if any, in dairy work.....

REFERENCES: \*—I am personally acquainted with the above applicant and believe..... to be of good moral character, industrious, studious, and physically and otherwise capable.

Name..... Name.....

Position..... Position.....

Address..... Address.....

\*References: two are necessary and should be preferably by your teacher, pastor, or some public official.  
This blank must not be used for enrollment in the *Reading Course*. A card for that purpose will be sent on application.

This application should be mailed to Professor W. A. Stocking, jr., Cornell University, Ithaca, New York

### Special Expenses

General fee (to pay partially for materials used) . . . . .	\$15.00
Laboratory deposit (part returnable) to cover rental of suits, laundry, and breakage . . . . .	6.00
Books, about . . . . .	5.00
One suit blue overalls, about . . . . .	1.00

Five dollars of the general fee must be paid as soon as the application is accepted; see p. 4. Names of students will be entered in the order of these payments.

Books, notebooks, and blue overall suits can be purchased at reasonable prices in Ithaca. The white suits and rubber aprons for use in the creamery and laboratory are furnished by the Department and rented to students as stated above.

The cost of books includes notebooks, and varies according to the number of books the student wishes to purchase. It is necessary to have notebooks and a creamery account-book. The latter costs \$1.00, and all students are expected to have the same kind of book.

### Certificate of Proficiency

Upon the successful completion of the Course in Dairy Industry, a student may become an applicant for a Certificate of Proficiency under the following general terms and conditions.

A person who has been one full term in attendance upon the course and has satisfactorily passed all of the examinations required, may become a candidate for a Certificate of Proficiency in the kind of work in which he is engaged.

Such a candidate must spend one full year or more as manager or first man, in work at an approved creamery, cheese factory, market-milk plant, or farm dairy. He must report regularly, upon blanks furnished for the purpose, such information about his work and products as may be required, and each month must send a sample of his dairy product (milk, cream, butter, or cheese) to the monthly judging of dairy products. He must have his work in readiness for inspection at any time.

On the satisfactory completion of these requirements, a certificate will be granted. Under certain conditions more than one year's work may be required.



### Positions

The College does not promise to find positions for students registered in this course, but it has opportunity to recommend students for a large number of positions. Thus far it has been difficult to find students for all the places that the College has been asked to fill.

Previous experience in a well-conducted dairy is strongly advised for those who come to the College expecting to be recommended for positions. Many students who have taken the Course in Dairy Industry have secured an increase in their salary during the following season sufficient to pay the entire cost of the course. Such results, though not guaranteed, are not uncommon; they prove that there are excellent opportunities in dairy industry.

### The City and the University

Ithaca is situated in Tompkins County at the head of Cayuga Lake. It is a city of about fifteen thousand inhabitants. It is reached by the Lehigh Valley and the Delaware, Lackawanna, and Western Railroads, also by steamer on the lake in the summer. The University stands on a plateau about four hundred feet above the lake. The officers of instruction and administration of Cornell University number 675. The campus and grounds cover 1095 acres.

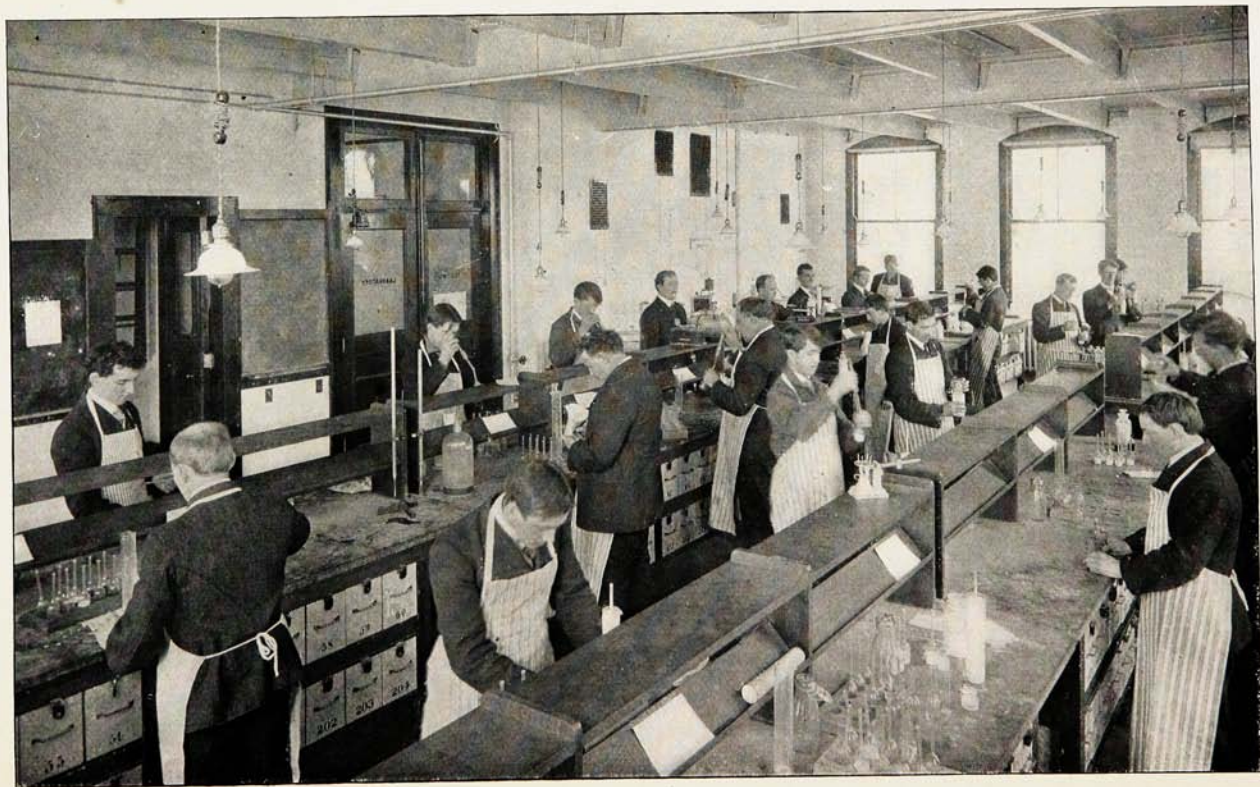
The main buildings of the University are over thirty in number, providing quarters for the several colleges of the University. These are the Graduate School and the College of Arts and Sciences, Law, Medicine, Agriculture, Veterinary Medicine, Architecture, Civil Engineering, and Mechanical Engineering.

The New York State College of Agriculture at Cornell University is now occupying the new buildings erected by the State. These buildings are large and well equipped, and afford an attractive and comfortable home for the College.

### Social and Religious Advantages

Every year the students in each of the several Winter Courses have formed clubs. These societies meet once a week and debate subjects of special interest, discuss various problems, sing college songs, and indulge in other forms of social entertainment. Every Winter Course student is urged to attend these meetings.

The Winter Course students are welcomed at the meetings of the Agricultural Association, the Horticulturists' Lazy Club, the Poultry Association, the Round-Up Club, and the other organizations of



MILK-TESTING LABORATORY



students in the College. The meetings of these societies are devoted to discussions of live agricultural subjects and to the promotion of a fraternal feeling among the students. On the first Thursday evening of each month the Director of the College meets the agricultural faculty and students in the "Agricultural Assembly". At this meeting the Director gives a talk on matters of especial importance to those interested in agriculture and country life, or a reading, which is followed by singing and social intercourse.

Each winter the students in the various Winter Courses compete for the Morrison Winter Course Trophy Cup. Last year the contest was a series of debates, as a result of which the cup was awarded for one year to the Winter Course in General Agriculture.

The Farmers' Week will be held this year in the week of Washington's Birthday, Feb. 19 to 24, inclusive. At this convention, discussions are held on all the leading agricultural topics. All farmers of the State are invited to attend.

The Agricultural Experimenters' League meets at the University during Farmers' Week. It is designed to develop the spirit of investigation and to promote a closer friendship among the farmers of the State. All students in the Winter Courses are eligible to membership in this League, and should attend the meeting. During this week, also, there is held the annual meeting of the Students' Association of the New York State College of Agriculture, an organization of present and former students for social purposes and to promote the interests of the College and of country-life affairs at large. Winter Course students have equal privileges with others in this Association.

Religious services, provided for by the Dean Sage Preachership Endowment, are conducted in Sage Chapel throughout the college year by eminent clergymen selected from the various religious denominations. These services are supplemented by the Cornell University Christian Association, a voluntary organization of students and professors formed for their own religious culture and the promotion of Christian living in the University. The Christian Association has its home in Barnes Hall; it has a permanent secretary and a carefully selected Biblical library, also comfortable reading and recreation rooms. Courses in Bible study are conducted throughout the year and special courses are provided for the students in the Winter Courses.

There is in addition to the Young Men's Christian Association, a flourishing Young Women's Association, with quarters in Barnes Hall.



The students of the University are welcomed by the numerous churches in the city of Ithaca at all their services.

### Methods of Instruction

Instruction, though partly by lectures and recitations, is in large part by actual practice in the different kinds of dairy work. The class assembles daily at 8 a. m., and the class work continues two hours. The students are then assigned by sections or squads to different kinds of practice for the remainder of the day. These assignments are so made that in the course of the term each student has a due amount of work in the different departments.

### Lectures and Recitations

These are given in one-hour periods. Frequently they are replaced by examinations; often also a part of the hour is occupied by informal discussions of former lectures or of topics previously assigned for study. The subjects of the required lecture courses and the approximate number of hours given to each are as follows.

**20. Milk and its Products.** Five hours a week. Lectures, M T W Th F, 9. Dairy Building 222. Professor STOCKING, Assistant Professor ROSS, and Messrs. AYRES, DUTTON, and FISK.

This course includes a full description of the secretion or formation of milk, its nature and composition, the methods of testing it, its care and preservation, the manufacture of different dairy products, conditions affecting their quality, method of marketing, the business side of dairying, the construction of dairy buildings, and the legal requirements applying to dairy products. Special attention is given to dairy bacteriology and dairy sanitation. The lectures are supplemented by references to dairy literature, books, current periodicals, and experiment station publications.

**3. Animal Husbandry, Feeds and Feeding.** Three hours a week. Lectures, W M F, 8. Dairy Building 222. Professor WING and Assistant Professor SAVAGE.

This course deals with the principles and practice of compounding and feeding the most economical rations.

**21. Dairy Mechanics.** One hour a week. Lectures, S, 9. Dairy Building 222. Mr. AYRES.

The care of the boiler and engine, construction of separators, installation of shafts and pulleys, pipe-fitting, belt-lacing, soldering, etc.

**22. Dairy Chemistry.** Two hours a week, the first five weeks of the term. Lectures, T Th, 8. Dairy Building 222. Mr. TROY.

The elementary principles of chemistry are explained, that the student may better understand the composition of dairy products and the chemical changes connected with and influencing dairy operations.

**23. General Agriculture.** Two hours a week, the last seven weeks of the term, Lectures, T Th, 8. Dairy Building 222. Professors STONE, CAVANAUGH, WARREN, WEBBER, and others.

In this course several brief lectures are given on subjects intimately related with dairy industry, such as farm manures, commercial fertilizers, and the improvement of the land by judicious cropping.

**12. Diseases of Dairy Cattle, and Veterinary Hygiene.** One hour a week. Lectures, S, 8. Dairy Building 222. Dr. UDALL, and special lectures by Director MOORE and Dr. WILLIAMS.

This course includes a discussion of the most common diseases of dairy cattle, their prevention and cure, the ventilation of stables, and general questions of animal hygiene.

### Practice

All class work is supplemented by laboratory or practical exercises as follows.

**30. Butter.** Hours as assigned. Mr. AYRES.

The creamery has most of the apparatus found in a well-equipped commercial plant. The milk is received, weighed, sampled, and separated, and the entire process of ripening cream and churning carried through in the most thorough manner. Special attention is given to pasteurization and the use of starters. Every step of the work is performed by students under the close supervision of the instructor.

**31. Cheese.** Hours as assigned. Mr. DUTTON and Mr. FISK.

The cheese room is equipped with all necessary apparatus, such as is used in large factories for making cheddar cheese. All the work is performed by students and every step is carefully observed and reported by them on blank forms provided for the purpose. Special attention is given to judging the quality of milk for making cheese and to judging the cheese when ready for market.

**32. Fancy Cheese.** Hours as assigned. Mr. FISK.

A study of a few varieties of fancy cheese.

**33. Market Milk.** Hours as assigned. Assistant Professor ROSS.

The market-milk rooms are equipped with apparatus such as is found in commercial plants. Students are given practice in preparing and bottling milk and cream for retail trade. Quick and accurate methods of standardizing milk and cream are taught.

**34. Testing.** Hours as assigned. Mr. TROY.

The testing laboratory is fitted with all appliances necessary for making the usual quick tests of milk and its products, including lactometers and a variety of Babcock testers. Each student is expected to become familiar with the Babcock method of determining fat, the calculation of total solids, and the more simple tests for preservatives and adulterations.

**35. Dairy Mechanics.** Hours as assigned. Mr. AYRES.

The student has an opportunity to learn the construction of the boiler and engine, to care for them, to take separators entirely apart and to set them up again, to repair pipes, to solder, to lace belts, etc.





DAIRY-MECHANICS ROOM



**36. Arithmetic and Bookkeeping.** Hours as assigned. Assistant Professor Ross.

A thorough drill is provided in simple problems, such as are constantly arising in all kinds of dairy work, and in the keeping of factory accounts.

**37. Dairy Bacteriology.** Hours as assigned. Professor STOCKING and Mr. Cook.

Elementary laboratory work will be given to show the nature of bacteria and their relation to the handling of milk and dairy products.

## A SPECIAL ONE-WEEK COURSE FOR MANAGERS OF FACTORIES AND CREAMERIES

Beginning Thursday morning, Feb. 29, 1912, and closing  
Wednesday night, Mar. 6, 1912

This course is intended for managers of creameries and factories who cannot be absent from their business for any considerable time, but who wish to come to the College to get the latest knowledge in their special work. All the regular branches of cheese making and butter making will be taught and special attention will be given to the use of the moisture and Babcock tests, creamery over-run, construction of factory and creamery buildings, drainage and water supply, commercial starters, relation of bacteria to dairy products, market milk, dairy inspection, judging dairy products, keeping factory accounts, etc.

### Requirements for Admission; Expenses

The only requirement for admission to this one-week course is that the applicant shall have had at least one year of experience as manager of a factory or creamery.

The only fee will be five dollars, payable at the time of registration. This covers the use of white suits, apparatus, and materials required in connection with the laboratory and practice work.

For cost of board and other expenses, see page 6.

For further information regarding instruction in dairy industry, address W. A. STOCKING, JR., Professor of Dairy Industry, Ithaca, N. Y.



DAIRY BACTERIOLOGY LABORATORY

## ROSTER, WINTER OF 1910-11

The following persons were entered in the Winter Course in Dairy Industry given in 1910-11.

Adams, David	Clayton
Barden, Fred R.	Ithaca
Barrett, Ford E.	Cazenovia
Bartholomew, Allen P.	Reading Center
Bartlett, Luther R.	Norwood
Becker, Ivan S.	Hunters Land
Bichterman, Charles C.	Baldwin
Bliss, Charles C.	Groton City
Bond, John P.	Kentwood, La.
Bostwick, Harrison F.	Waits
Brigham, Horace D.	Spencer
Brown, Wilfred A.	Delhi
Burnett, Jack E.	Whitesville
Burtis, Warren L.	DeRuyter
Chase, Benjamin	Amsterdam
Cheney, Leon E.	Potsdam
Clark, Lester F.	Unadilla
Clark, Roy C.	Norwood
Cochran, Freeland	Beaver Meadow
Cole, Howard T.	Martville
Collins, David P.	Philadelphia, Pa.
Congdon, Claud E.	Oswego
Conklin, Earl S.	Hunters Land
Connolly, James Jr.	Monroe
Crissey, John C.	Ithaca
Donnelly, Thomas M.	Delhi
Dougall, William C.	Amsterdam
Douglass, William H.	Davenport
Driscoll, Francis E.	Whitney Point
Durham, Durston H.	Liverpool
Eckhard, Ray	Verona
Edwards, Charles O.	New York City
Fehr, Albert	East Steuben
Fieldman, Samuel	Brooklyn
Filkins, Henry B.	Phoenix
Fingar, Ernest	Branchport
Flanagan, William	Marietta
Forbes, DeWitt T.	Racket River
Forward, Edward E.	Redwood
Gardner, Ray B.	Altmar
Gaston, Edmund	Cayuga
Glezen, Andrew	Center Lisle
Hahn, Miss Hannah L.	Jacksonwald, Pa.
Haight, Frank L.	New Woodstock
Henry, John	Ogdensburg
Hitt, Melvin E.	Pepacton
Holdridge, Charles	Candor
Holt, George	Troupsburg
Hough, William F.	Campbell
Hover, Lee D.	Candor
Howland, Andrew J.	Whitney Point
Johnson, Charles B.	Cameron Mills



Kaple, Claude M.  
 Kaufman, Jacob  
 Kenyon, Giles M.  
 King, Ansel E.  
 Kingston, Fred A.  
 Korotkin, Benjamin J.  
 Kroose, Henry, Jr.  
 Landmesser, Albert  
 Lee, Raymond  
 Lester, Harry E.  
 Mackey, Nicholas  
 McMurray, Earl  
 McLaury, E. R.  
 Magee, Arthur J.  
 Main, Glen  
 Makely, Irving B.  
 Marland, John W.  
 Mitchelson, Fred B.  
 Morris, Lloyd C.  
 Morse, Duane H.  
 Nash, DeWitt G.  
 Neil, Chester A.  
 Nicholson, Francis  
 Northrop, Sanford H.  
 O'Brian, Stanley C.  
 Oliver, Hylon  
 Orr, Horace  
 Page, Arthur M.  
 Perry, Clayton W.  
 Perry, Forest A.  
 Perry, Ivan  
 Platner, William W.  
 Post, Ellery M.  
 Powers, James R.  
 Rogers, Hubert C.  
 Rumsey, Hugh E.  
 Rusch, Henry  
 Seager, Carl E.  
 Sibley, Gerald F.  
 Smith, Ray H.  
 Smith, Sherman B.  
 Smith, Sidney L.  
 Streeter, Melvin  
 Taylor, Mervyn H.  
 Terk, Avery H.  
 Titchener, Charlie  
 Walsh, Frank  
 Washburn, Claude S.  
 Washburn, LeRoy  
 Watkins, Stanley  
 Webster, Dean R.  
 Wildman, Clark L.  
 Woodward, Howard H.  
 Young, Lester

Almond  
 Colchester, Conn.  
 South Otselic  
 Otisville  
 Lawrenceville  
 East Hardwick, Vt.  
 Mt. Vernon  
 Basel, Switzerland  
 Hammond  
 Lacona  
 Cooperstown  
 Gansevoort  
 Delhi  
 Bethlehem, Conn.  
 Philadelphia, Pa.  
 Medusa  
 Corning  
 Camden  
 Hamilton  
 Truxton  
 Lamontville  
 Brasie Corners  
 Lincolnale  
 Richville  
 Mooers Forks  
 Whitney Point  
 Canajoharie  
 Middlefield  
 Hopkinton  
 Rathbone  
 Hopkinton  
 East Springfield  
 Baldwinsville  
 Salem  
 Hannibal Center  
 Ithaca  
 Brooklyn  
 Rochester  
 Cuba  
 New Woodstock  
 Victory  
 Canajoharie  
 Cato  
 Racket River  
 Jefferson  
 Eaton  
 Little Meadows, Pa.  
 Evans Mills  
 Parish  
 West Winfield  
 Watkins  
 McGraw  
 Woodhull  
 Cobleskill

## OTHER WORK OF THE COLLEGE OF AGRICULTURE

In addition to offering the Winter Courses, the New York State College of Agriculture at Cornell University is endeavoring to serve the agricultural interests of the State by the following and by other means.

**The Four-Year Course in Agriculture.** This course is of equal academic rank with other courses in the University. It offers a thorough theoretical and practical training in agricultural and country-life subjects. The equivalent of a high school training is necessary for admission. A program will be sent on application to the Secretary, College of Agriculture.

**Course in Rural Art,** comprising the junior and senior years in the four-year course, providing instruction in landscape gardening and related subjects.

**Course in Home Economics** for women, comprising the last two years of the four-year course.

**Special Work in Agriculture.** Special students take, as far as they are qualified to pursue them, whatever studies will be most valuable in the various departments. This opportunity to pursue special work is provided especially for those who wish to fit themselves for practical farming but cannot take a four-year course. About two years can be spent profitably in this work. In the admission of special students, each case is judged on its own merits. Persons desiring to enter as special students must be at least eighteen years of age and must submit a full statement of school and other experience, together with references. No non-resident of New York State under the age of twenty-three is admitted as a special student unless he can meet in full the requirements for entrance to the regular course.

**Special Course in Nature Study.** A two years course for those who desire to prepare themselves to teach elementary agriculture and nature study. Open to teachers or to students in the University who are preparing to teach.

**Summer School in Agriculture.** A six weeks course for the training of persons who desire to teach agriculture, including nature study and home economics. The courses are open not only to teachers, but also to other qualified persons who may wish to avail themselves of the opportunities offered.

**Farm Reading Course.** For those who are unable to leave their work but desire to learn. Practical bulletins on agricultural subjects are sent to the reader and correspondence is encouraged. Free to persons residing in New York. Address, Farmers' Reading Course, College of Agriculture.

**Farm Home Reading Course.** Similar to the above, but the bulletins discuss household economy, cooking, home furnishing, etc. Address, Farm Home Reading Course, College of Agriculture.

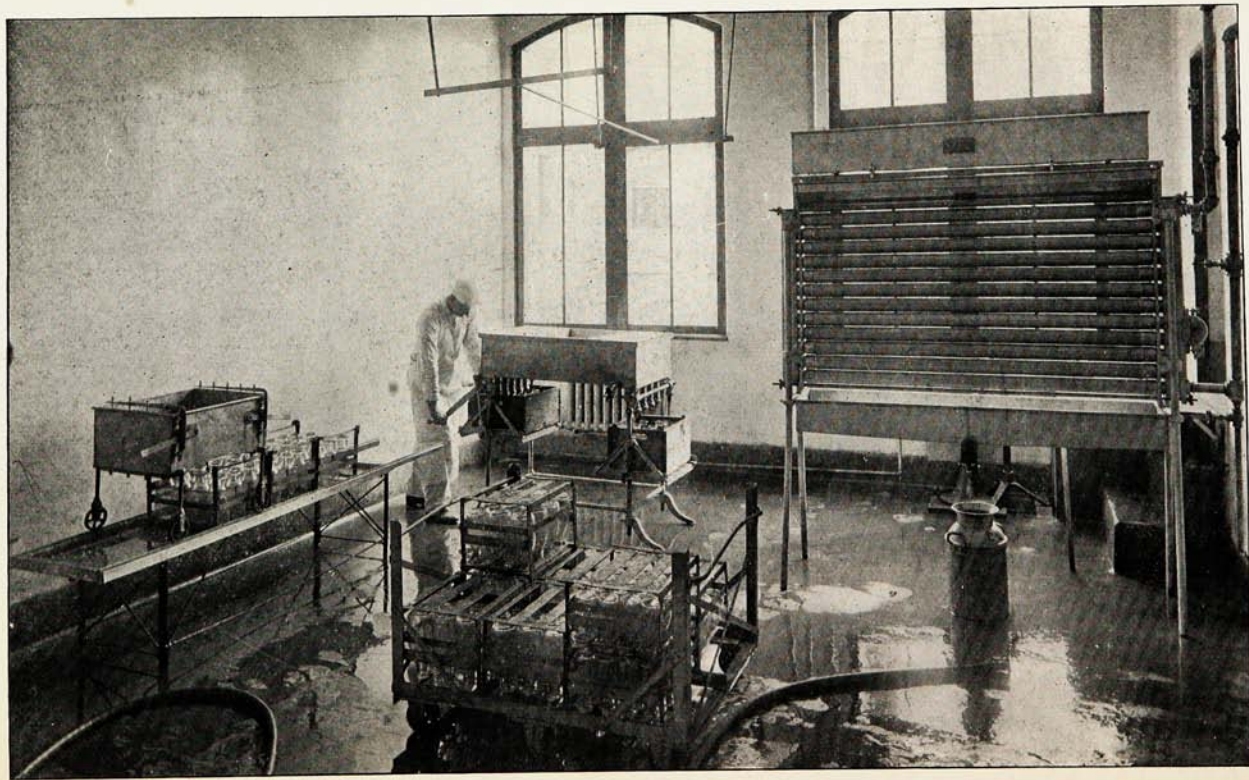
**Nature-Study Agriculture.** Extension work for teachers and pupils, particularly in the rural schools. A publication is issued in the interest of this work: The Cornell Rural School Leaflet, monthly, for pupils, with a Supplement for teachers. Address, Bureau of Nature Study, College of Agriculture.

**The Agricultural Experiment Station** issues bulletins on agricultural subjects which are sent free to residents of New York. Back numbers of some issues are available. Address, Superintendent of Mailing Rooms, College of Agriculture.

**Cooperative Experiments in Agriculture.**—The college cooperates with farmers in making demonstrations on their land that will be of direct practical value to them.

Correspondence and cooperation are solicited in connection with any of these various enterprises. For information, address  
L. H. BAILEY,  
Director of the College of Agriculture, Ithaca, N. Y.





MARKET-MILK BOTTLING ROOM



